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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,539

04/12/2007

Joachim Bamberg

13806/29

4997

26646 7590 06/09/2009

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EXAMINER

BELLAMY, TAMIKO D

ART UNIT

PAPER NUMBER

2856

MAIL DATE

DELIVERY MODE

06/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/581,539	Applicant(s) BAMBERG ET AL.	
	Examiner TAMIKO D. BELLAMY	Art Unit 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 18, 20, 23-27, 29-31, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleming et al. (5,337,661) in view of Dubois et al. (2003/0078681A1).

Re claims 18, 25, 26, 29, and 30, as depicted in figs. 1-4, and 6, Fleming et al. discloses detecting at least one flaw in a component (e.g., actual specimen or pipe or power plant component) and evaluating ultrasonic signals of the flaw. Fleming et al. discloses manufacturing a test specimen (e.g., simulation test block 22) for each point of the pattern (Col. 2, lines 23-39; Col. 3, lines 4-68; Col. 5, lines 45-56). **Fleming et al. lacks the detail of after generating an electronic specification of flaw, manufacturing a test specimen.** As depicted in figs. 1 and 8, Dubois et al. discloses using a representation of a manufactured object (18) using computer-aided design CAD (Pars 58 and 59). The CAD, which inherently includes the flaw, is equivalent to an electronic specification. Evidence can be found in (See Pars. 115 and 118), wherein the method (170) test a physical attribute (e.g., flaws, defects) in an area of a manufactured object (14). The manufactured object with the flaw is **constructed** based on the representation of the manufactured object (18). Therefore, the representation of the manufactured object (18) contains the specification/position of the flaw as well. Providing a generated electronic specification of the flaw would have been obvious to one having ordinary skill in the art as a means of increasing the accuracy of detecting the flaw which will lead to improved safety an prevent catastrophic failures.

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Re claim 20, Fleming et al. discloses the largest dimensions of the crack are smaller than a wavelength used for recording the ultrasonic signals (Col. 4, lines 39-55; Col. 5, lines 45-68; Col. 6, lines 1-59).

Re claim 23, Fleming et al. discloses the test specimen (e.g., simulation test block 22) has the same elastic parameters as the material of the component (Col. 2, lines 23-25).

Re claim 24, Fleming et al. discloses the manufacturing of the test specimen (e.g., simulation test block 22) being performed in accordance with the specification (Col. 2, lines 23-31; Col. 4, lines 31-55).

Re claim 27, Fleming et al. discloses the largest dimensions of the crack are smaller than a wavelength used for recording the ultrasonic signals (Col. 4, lines 39-55; Col. 5, lines 45-68; Col. 6, lines 1-59).

Re claim 31, Fleming et al. discloses the largest dimensions of the crack are smaller than a wavelength used for recording the ultrasonic signals (Col. 4, lines 39-55; Col. 5, lines 45-68; Col. 6, lines 1-59).

Re claim 34, Fleming et al. discloses the test specimen (e.g., simulation test block 22) has the same elastic parameters as the material of the component (Col. 2, lines 23-25).

2. Claims 19 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleming et al. (5,337,661) in view of Dubois et al. (2003/0078681A1) as applied to claims 18, 20, 23-27, 29-31, and 34 above, and further in view of Wienkamp et al. (DE10015702).

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Re claims 19 and 28, the combination of Fleming et al. and Dubois et al. discloses the claimed invention except the defects produced in a manufacturing step **by internal laser engraving**. As depicted in fig. 1, Wienkamp et al. discloses manufacturing a crack (e.g., engraving 2) in a test specimen (e.g. work piece 2) by internal laser engraving.

While the combination of Fleming et al. and Dubois et al. and Wienkamp et al. are not from the same analogous art, the court held that anticipation requires that a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of the claimed invention. In re King, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986); RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed, 468 U.S. 1228 (1984).

Anticipation, however, does not require such disclosure *in haec verba*. In re Bode, 550 F.2d 656, 660, 193 USPQ 12, 16 (CCPA 1977). In addition, it does not require that the prior art reference "teach" what the application at issue teaches. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983). Finally, Applicant is reminded that during examination claim limitations are to be given their broadest reasonable reading. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

Therefore, to modify the combination of Fleming et al. and Dubois et al. Fleming et al. by employing internal engraving would have been obvious to one of ordinary skill in the art at the time of the invention as means of placing an internal flaw with a more precision.

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3. Claims 21, 22, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleming et al. (5,337,661) in view of Dubois et al. (2003/0078681A1) as applied to claims 18, 20, 23-27, 29-31, and 34 above, and further in view of Balickas et al. (EP0743128).

Re claims 21 and 32, the combination of Fleming et al. and Dubois et al. discloses the claimed invention except the defects produced in a manufacturing step of a material transparent to visible light. As depicted in fig. 1, Balickas et al. discloses a manufacturing step of implanting a mark in a transparent material (5). While the combination of Fleming et al. and Dubois et al. and Balickas et al. are not from the same analogous art, the court held that anticipation requires that a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of the claimed invention. In re King, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986); RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed, 468 U.S. 1228 (1984). Anticipation, however, does not require such disclosure *in haec verba*. In re Bode, 550 F.2d 656, 660, 193 USPQ 12, 16 (CCPA 1977). In addition, it does not require that the prior art reference "teach" what the application at issue teaches. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983). Finally, Applicant is reminded that during examination claim limitations are to be given their broadest reasonable reading. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). Using transparent material would have been obvious to one having ordinary skill in the art as a means of replacing a non-transparent

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material for the purpose of passing light through a material that does not absorb or reflect the light beam.

Re claims 22 and 33, the combination of Fleming et al. and Dubois et al. discloses the claimed invention except transparent material including at least one of crown glass, optical glass, borosilicate glass, and quartz glass. As depicted in fig. 1, Balickas et al. discloses a manufacturing step of implanting a mark in a transparent material (5). While Fleming et al. and Balickas et al. are not from the same analogous art, the court held that anticipation requires that a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of the claimed invention. In re King, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986); RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed, 468 U.S. 1228 (1984). Anticipation, however, does not require such disclosure *in haec verba*. In re Bode, 550 F.2d 656, 660, 193 USPQ 12, 16 (CCPA 1977). In addition, it does not require that the prior art reference "teach" what the application at issue teaches. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983). Finally, Applicant is reminded that during examination claim limitations are to be given their broadest reasonable reading. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). While Balickas et al. does not specifically state that transparent material is a glass, the court held in In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960), that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. Using transparent

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material would have been obvious to one having ordinary skill in the art as a means of replacing a non-transparent material for the purpose of passing light through a material that does not absorb or reflect the light beam.

Response to Arguments

4. Applicant's arguments with respect to claims 18-34 have been considered but are moot in view of the new ground(s) of rejection. See rejections above. The action remains non-final since independent claim 30 has not been amended and the applied references for this claim have changed.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMIKO D. BELLAMY whose telephone number is (571)272-2190. The examiner can normally be reached on Monday - Friday 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hezron Williams/
Supervisory Patent Examiner, Art Unit
2856

Tamiko Bellamy
/TB/
June 4, 2009